

FIG. 3

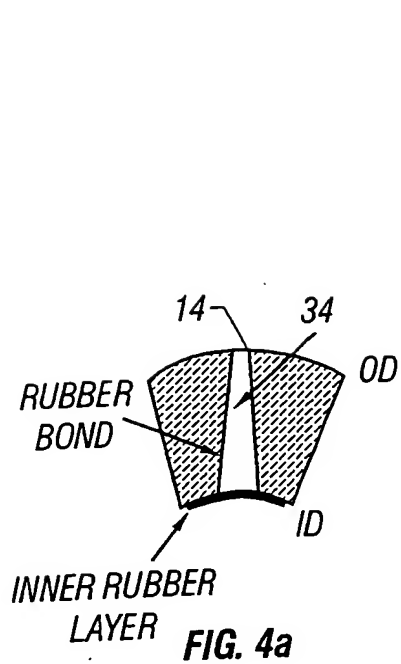


FIG. 4a

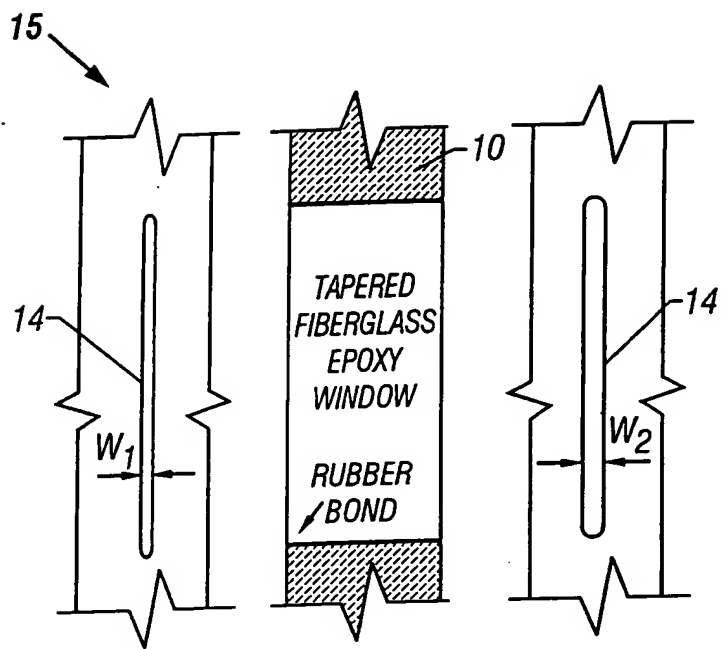


FIG. 4b

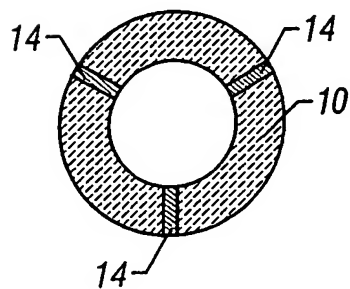
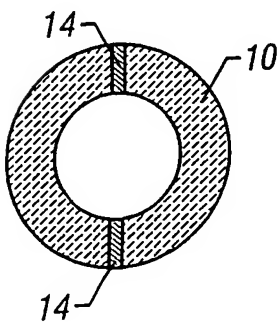
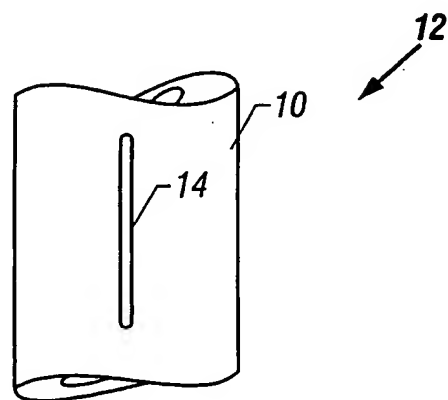
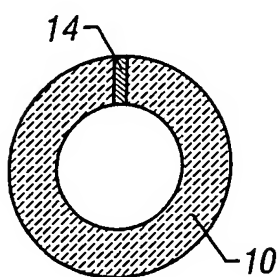
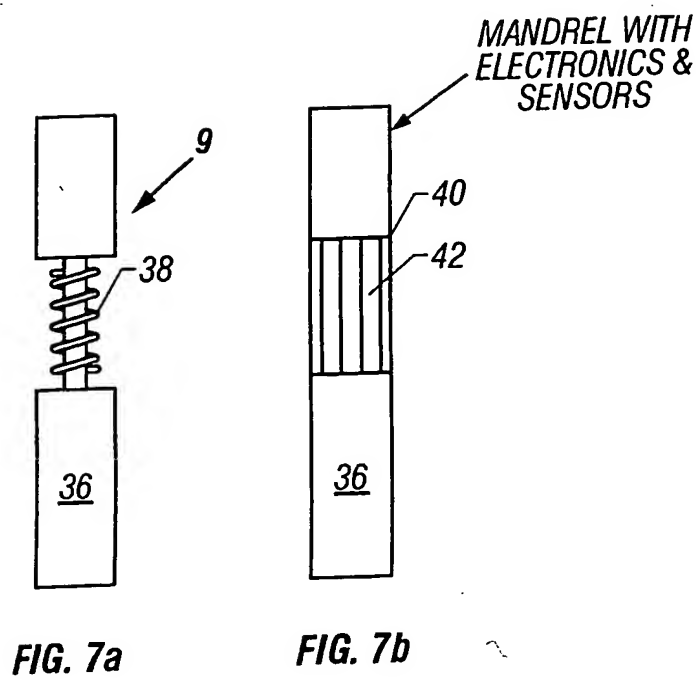
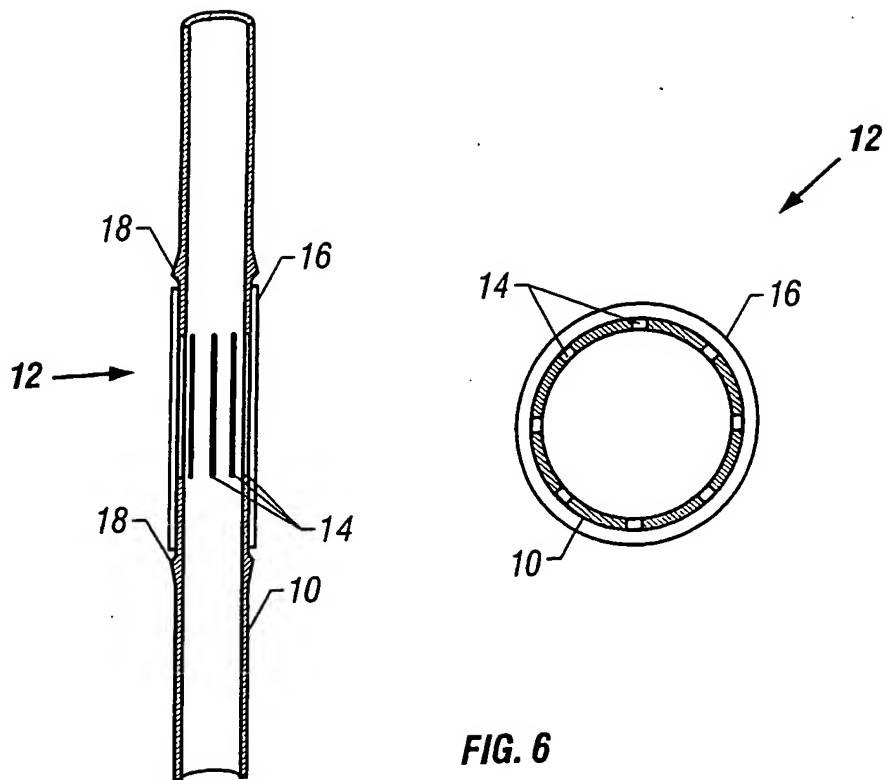


FIG. 5



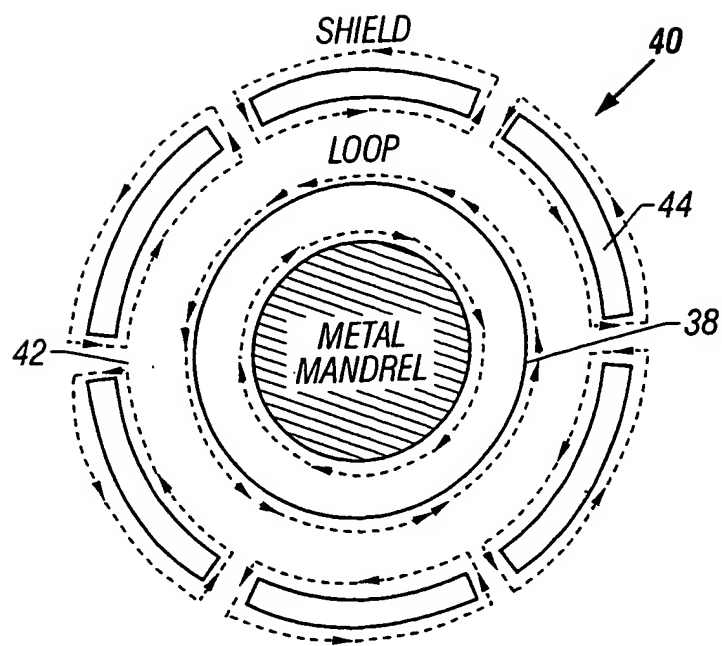


FIG. 8

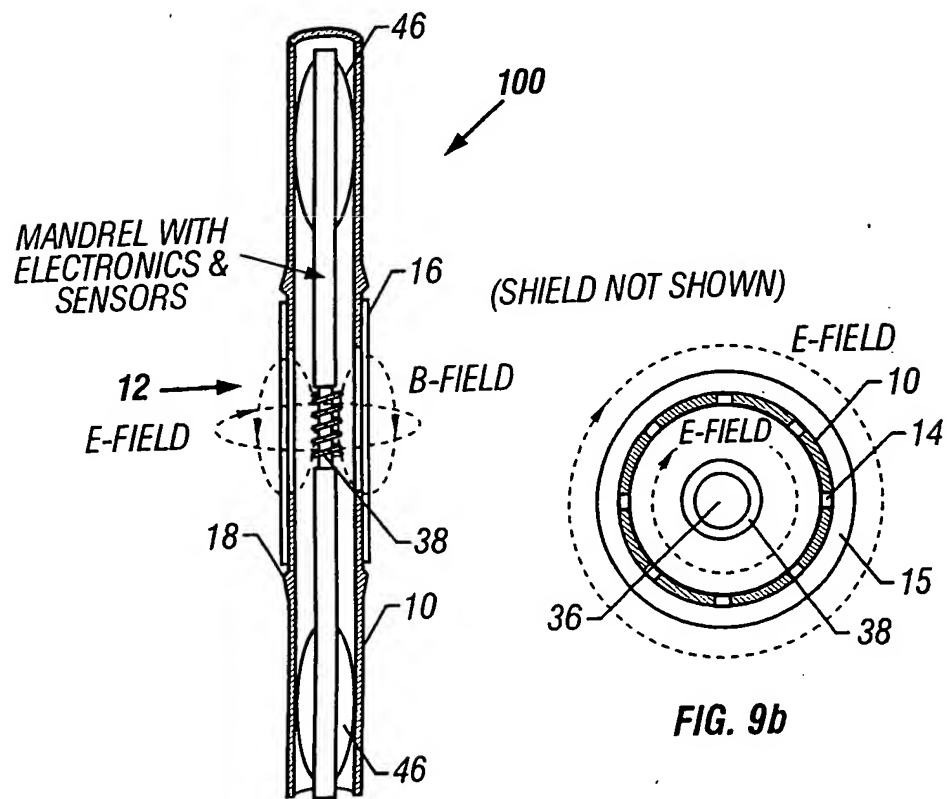


FIG. 9a

FIG. 9b

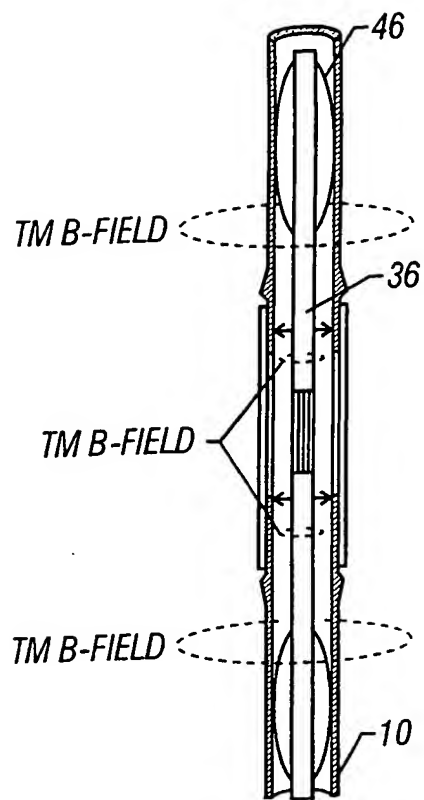


FIG. 10a

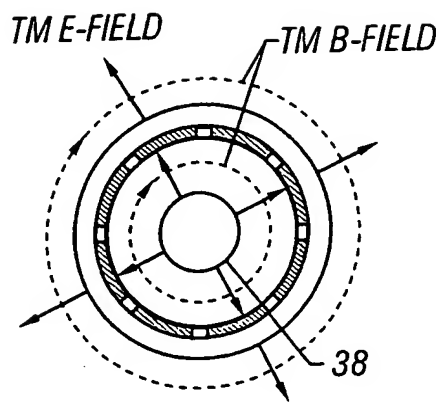


FIG. 10b

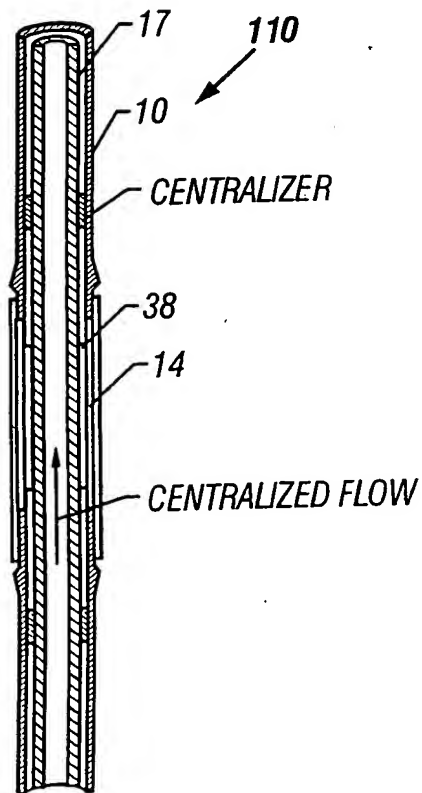


FIG. 11

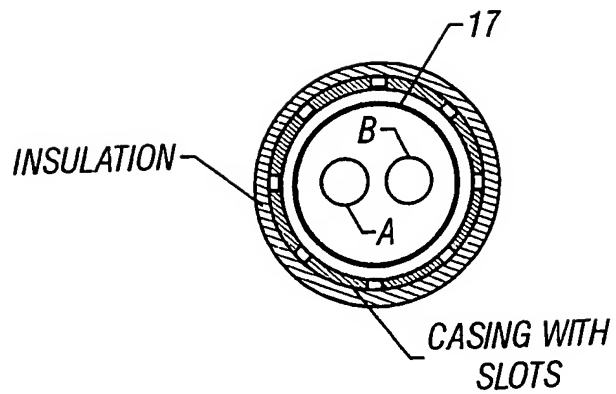
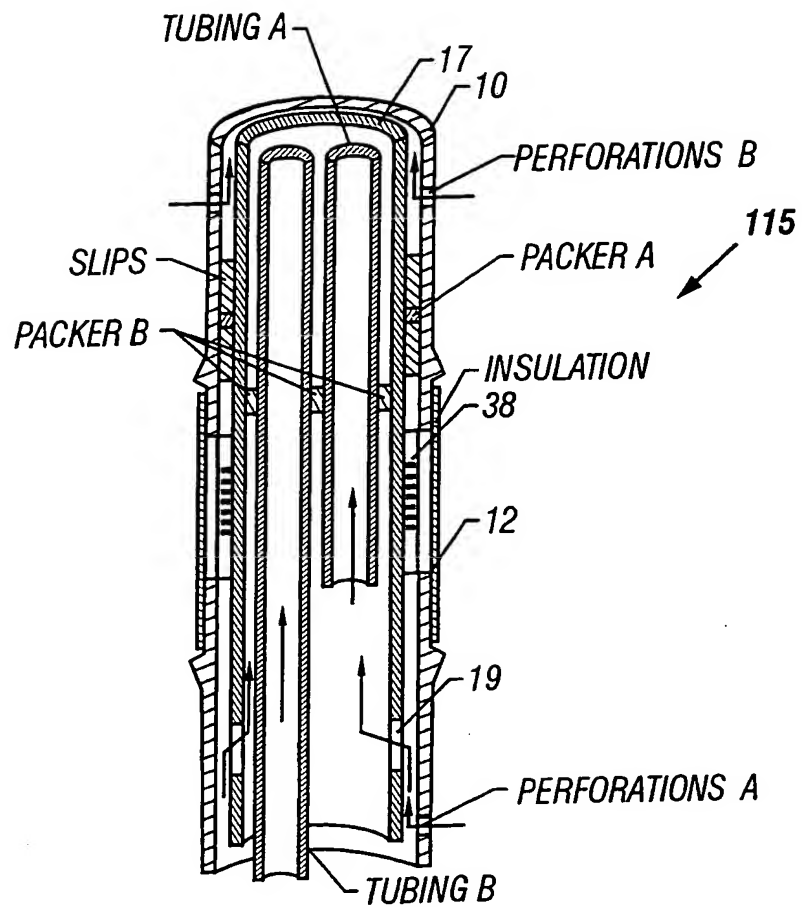


FIG.12

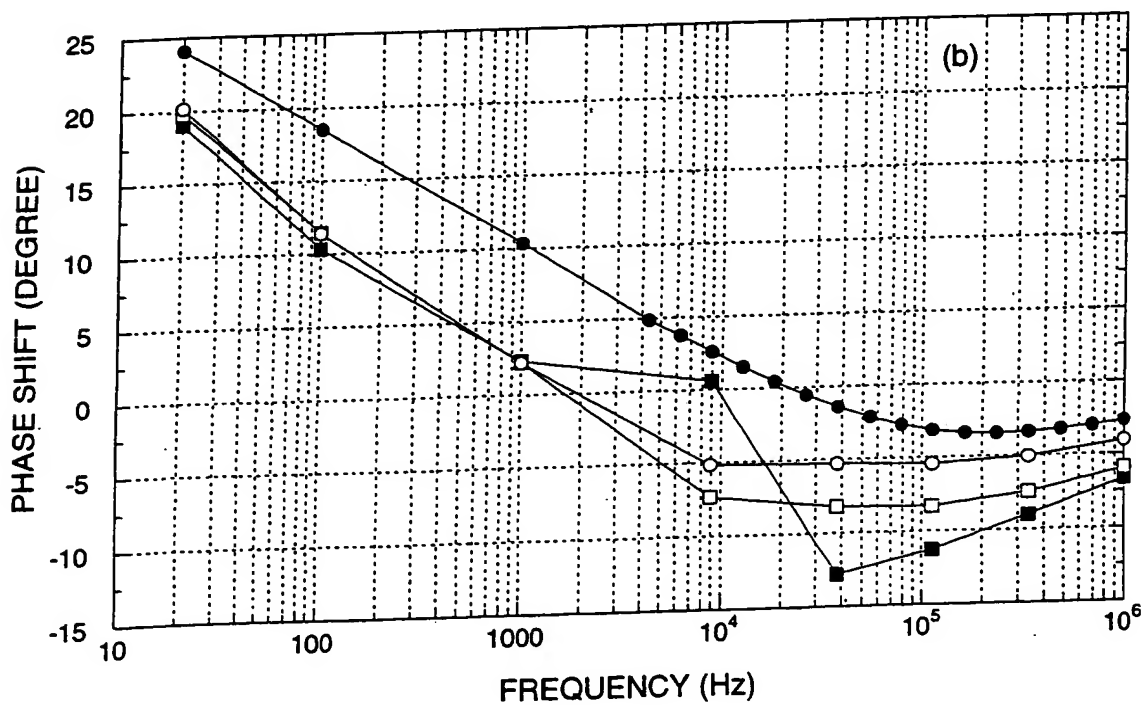
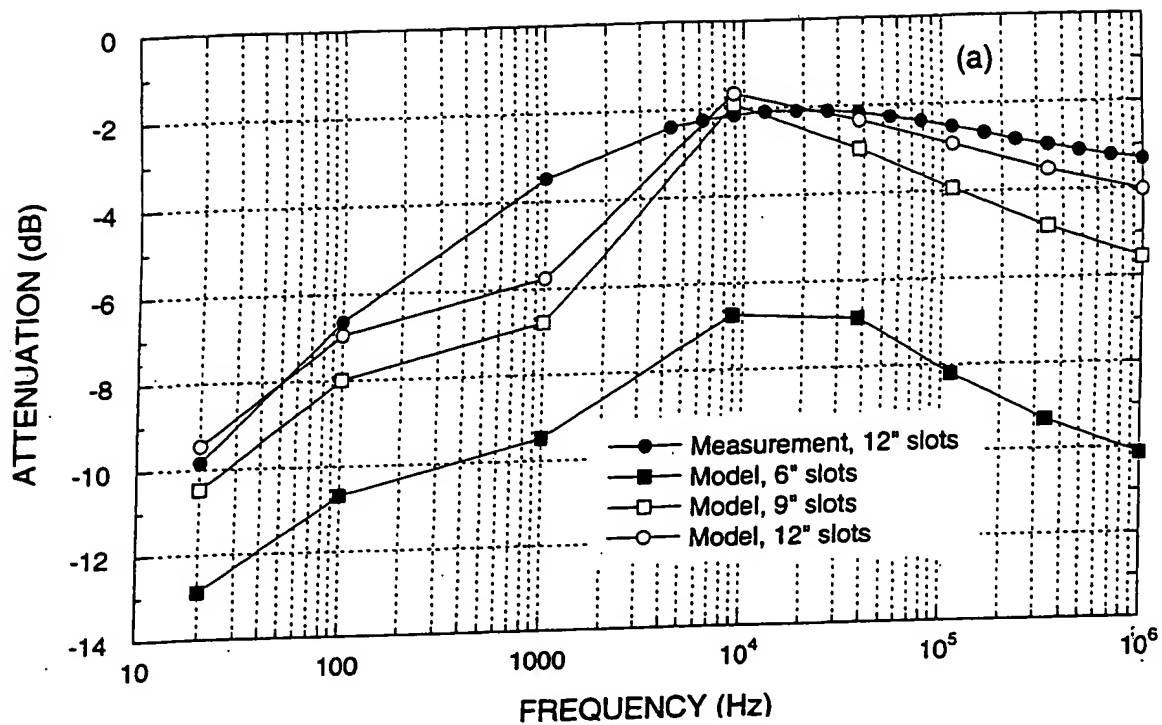


FIG. 13

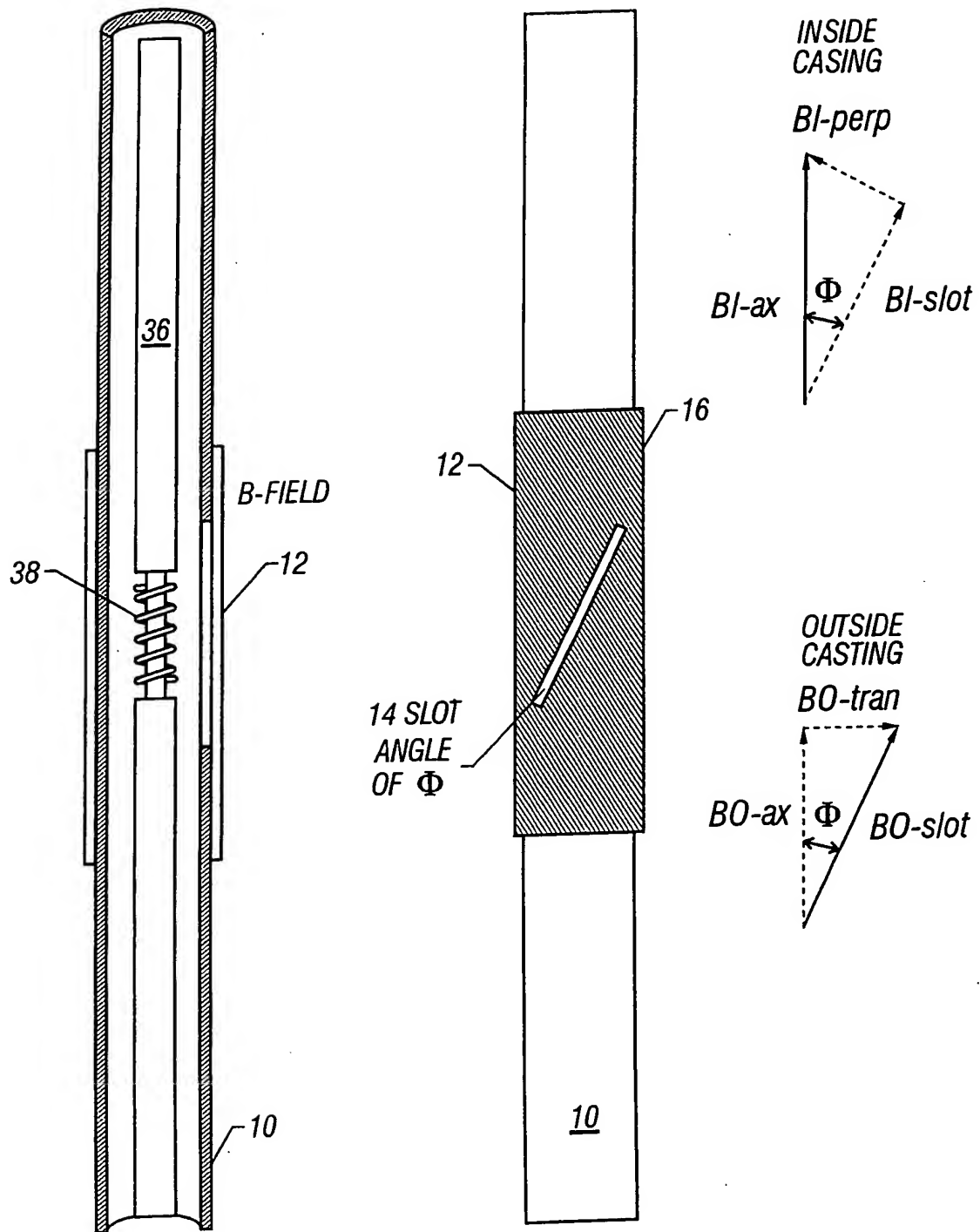


FIG. 14

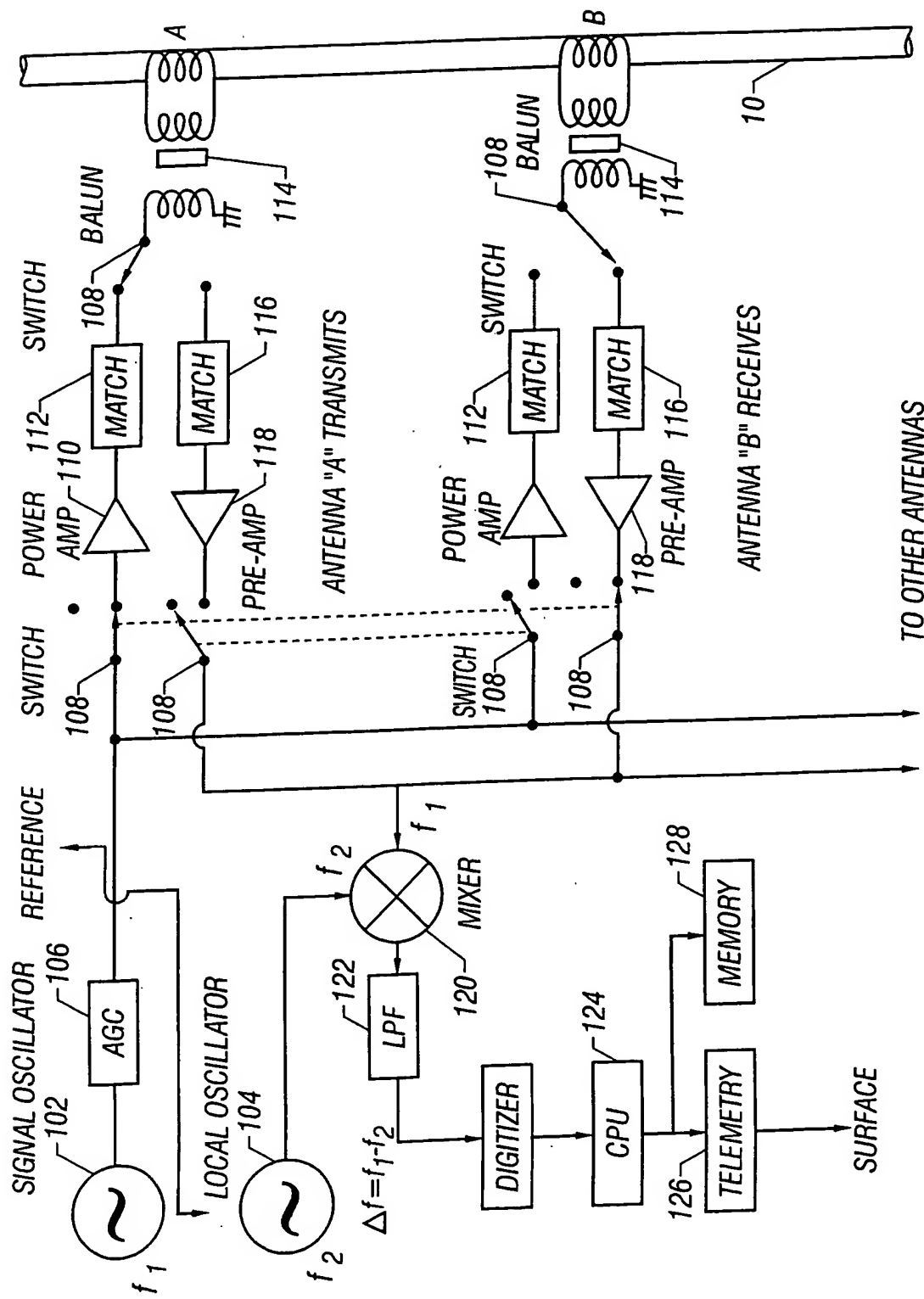


FIG. 15

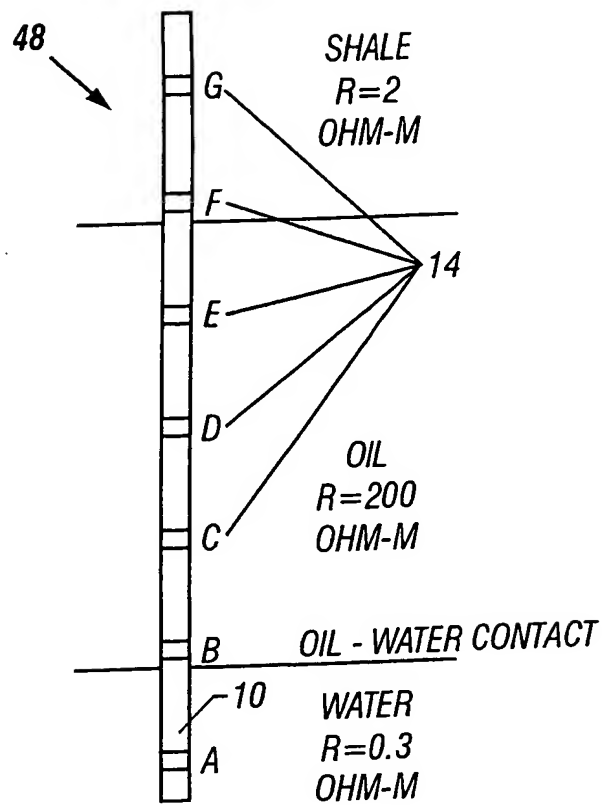


FIG. 16

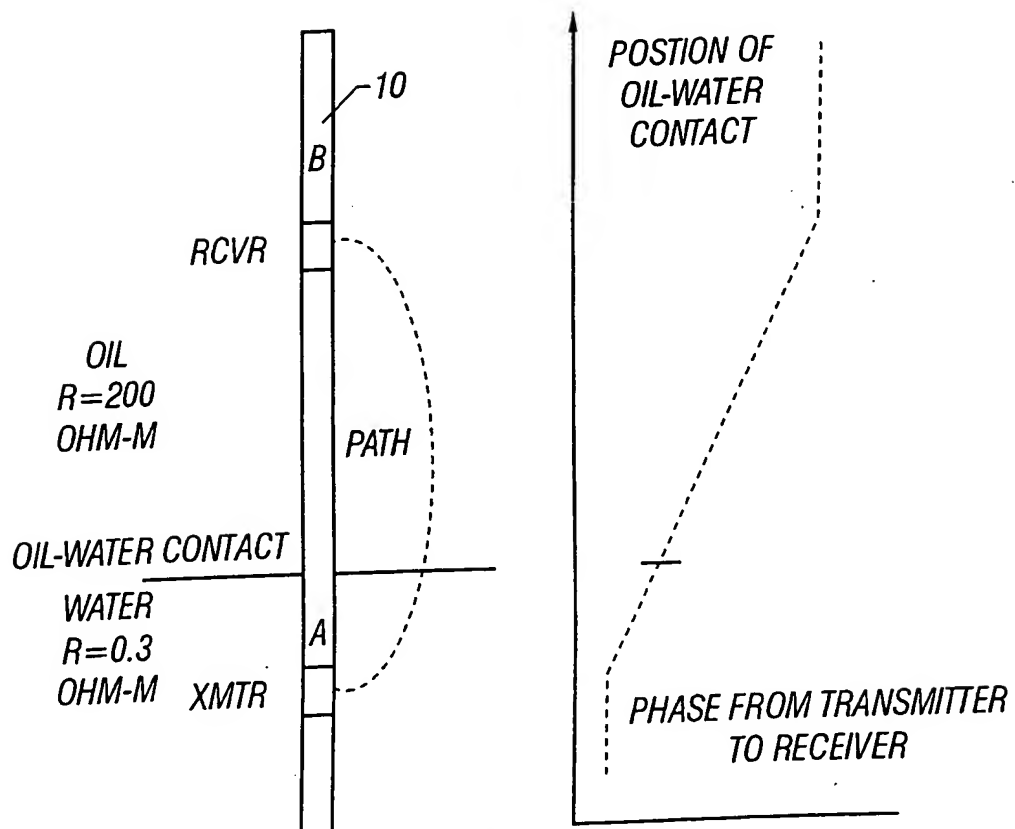


FIG. 17

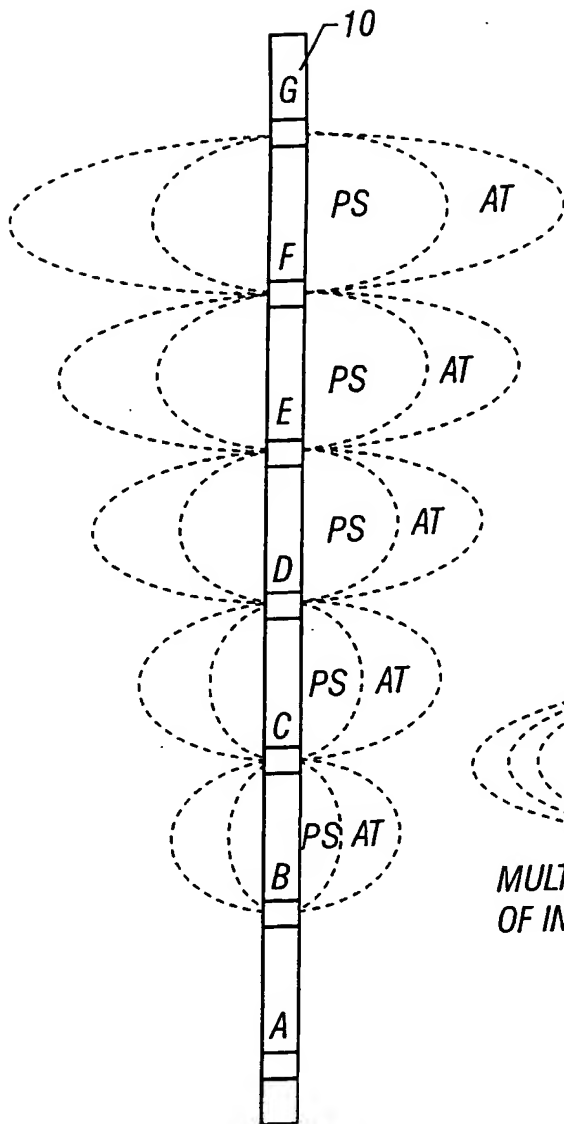


FIG. 18

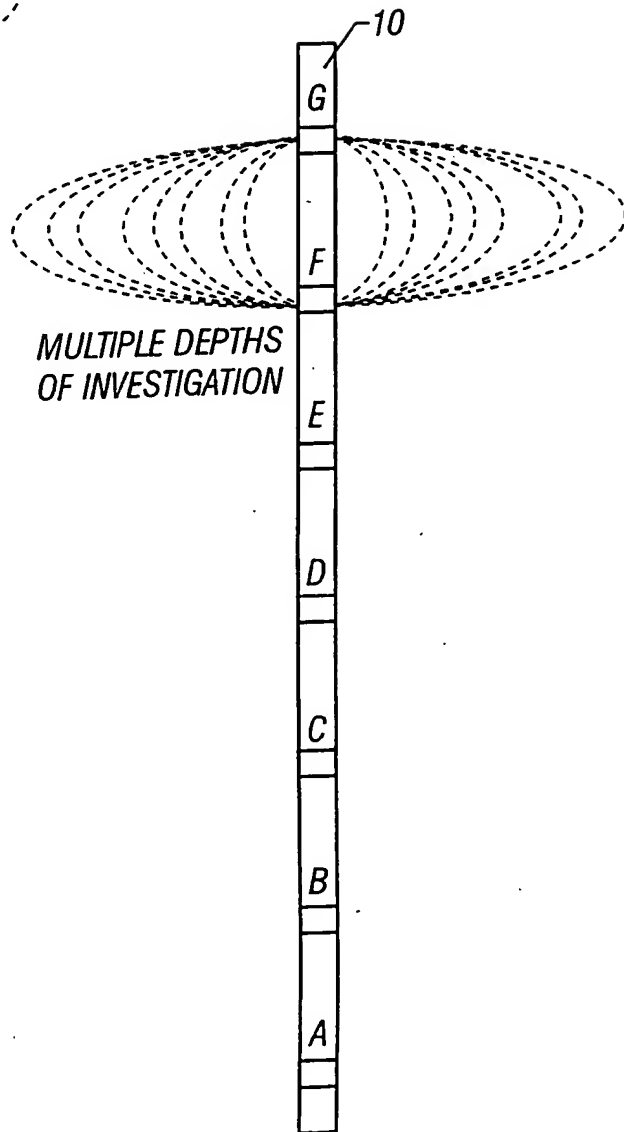


FIG. 19

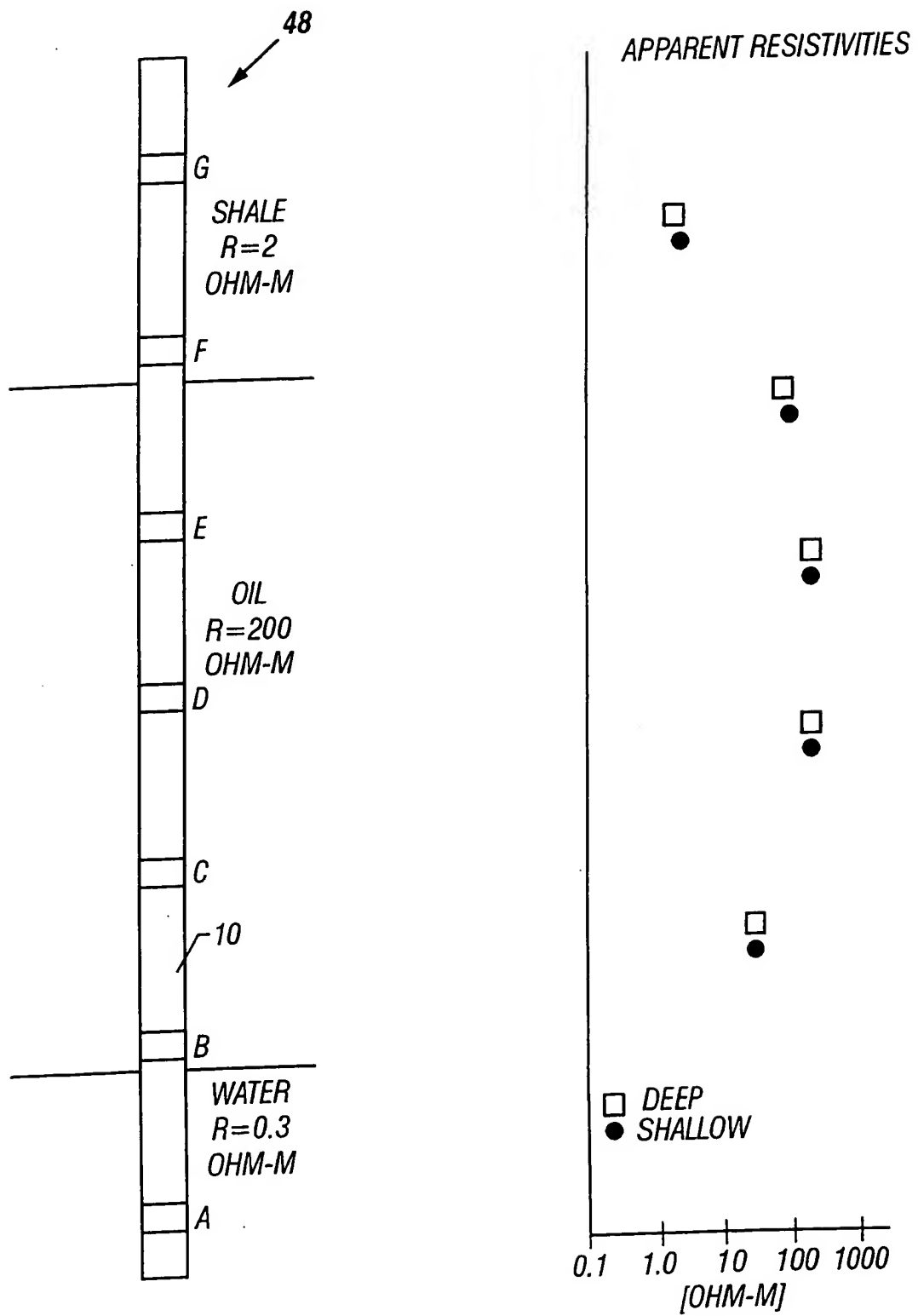


FIG. 20a

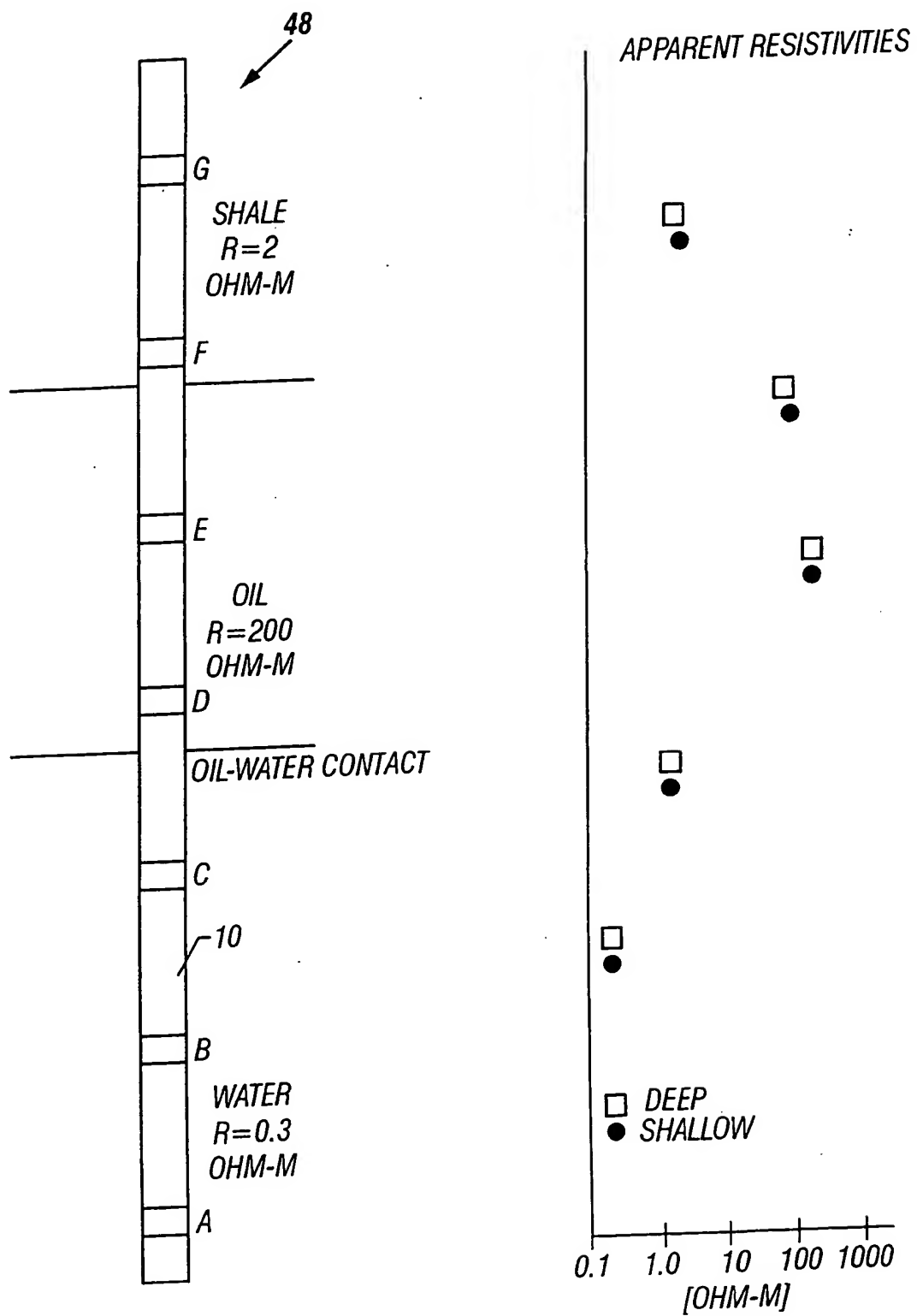


FIG. 20b

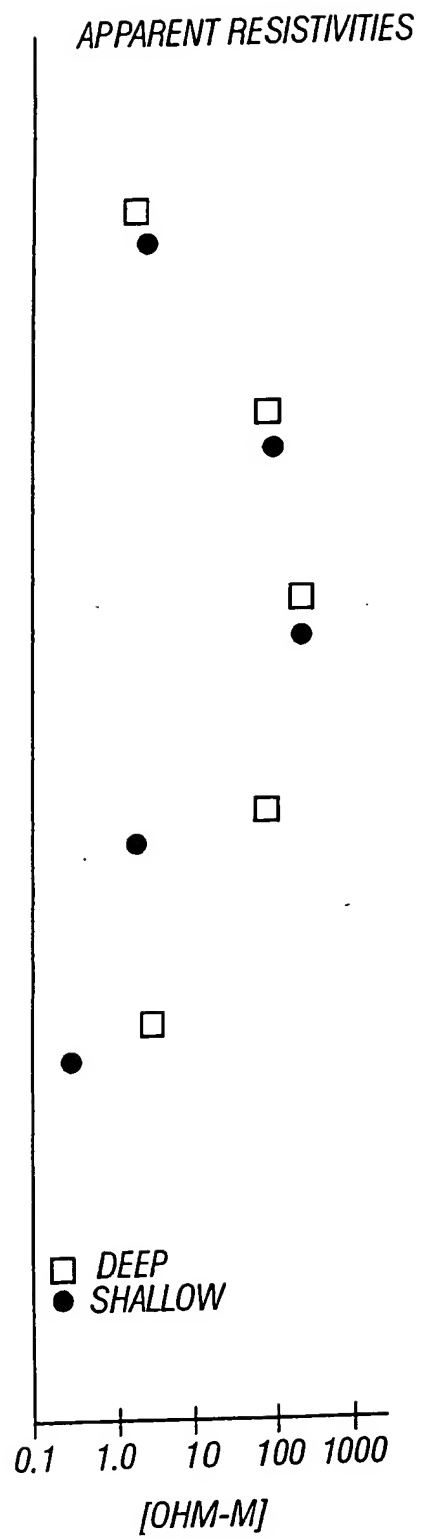
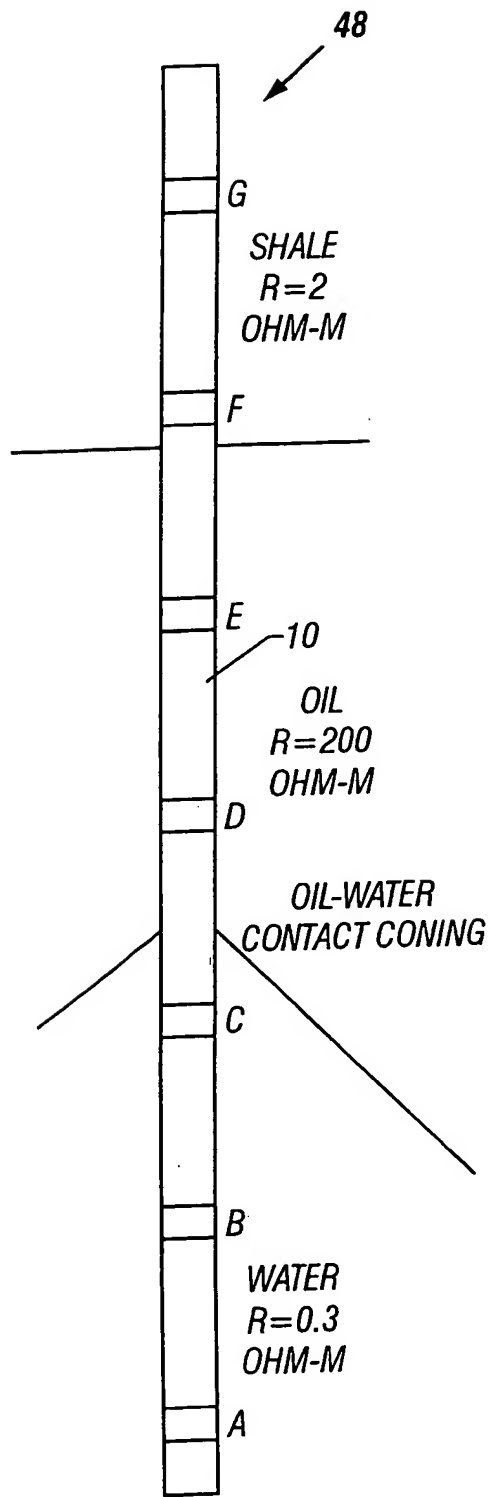


FIG. 20c

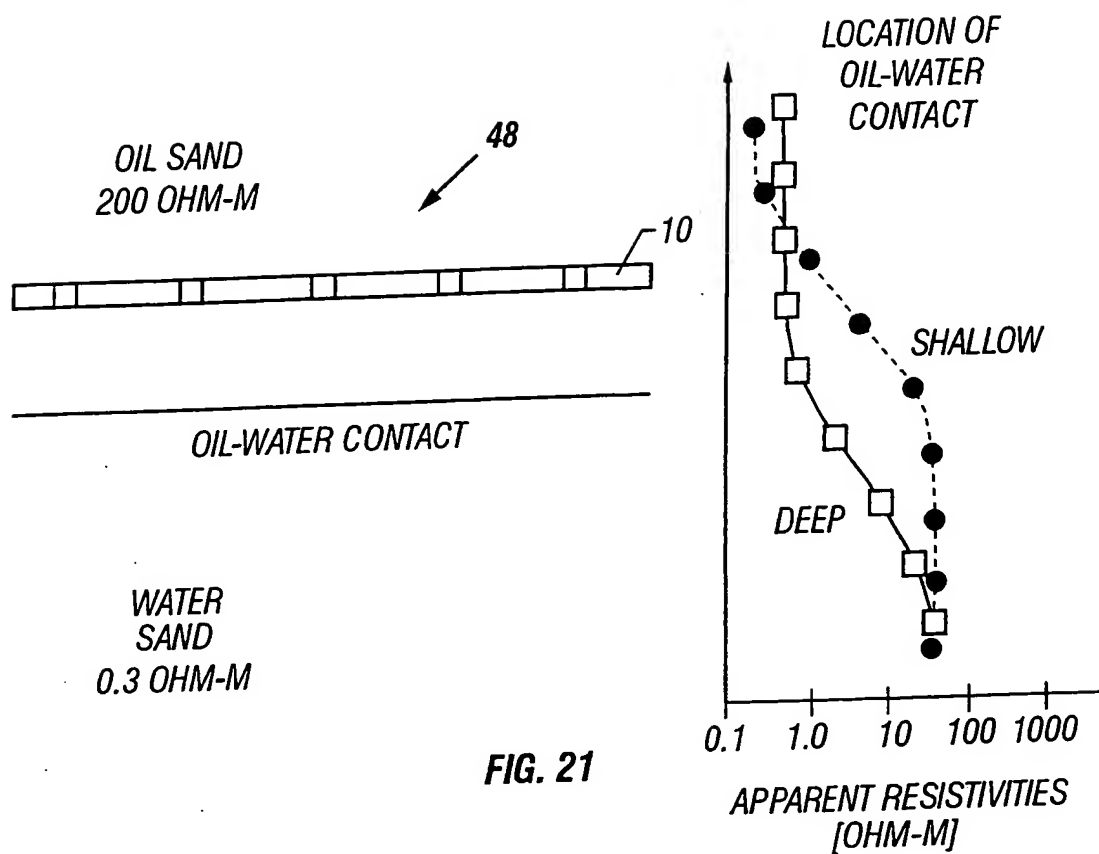


FIG. 21

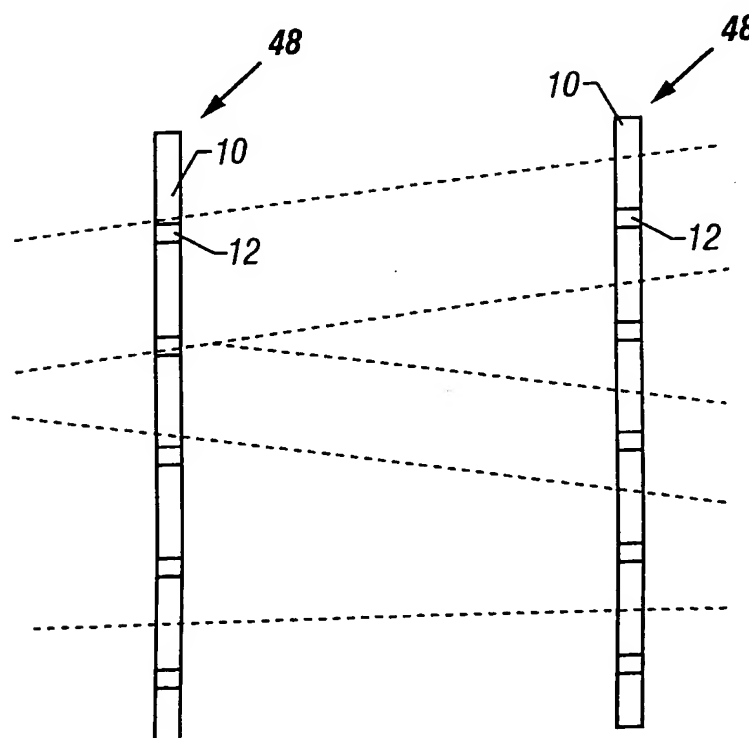


FIG. 22

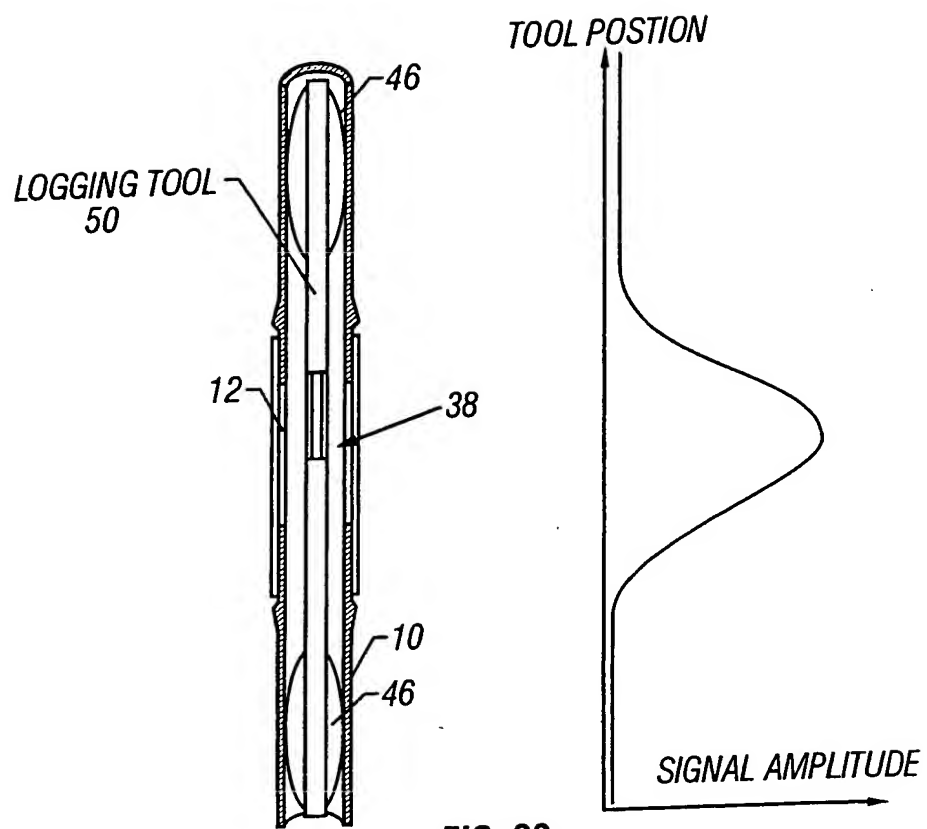


FIG. 23

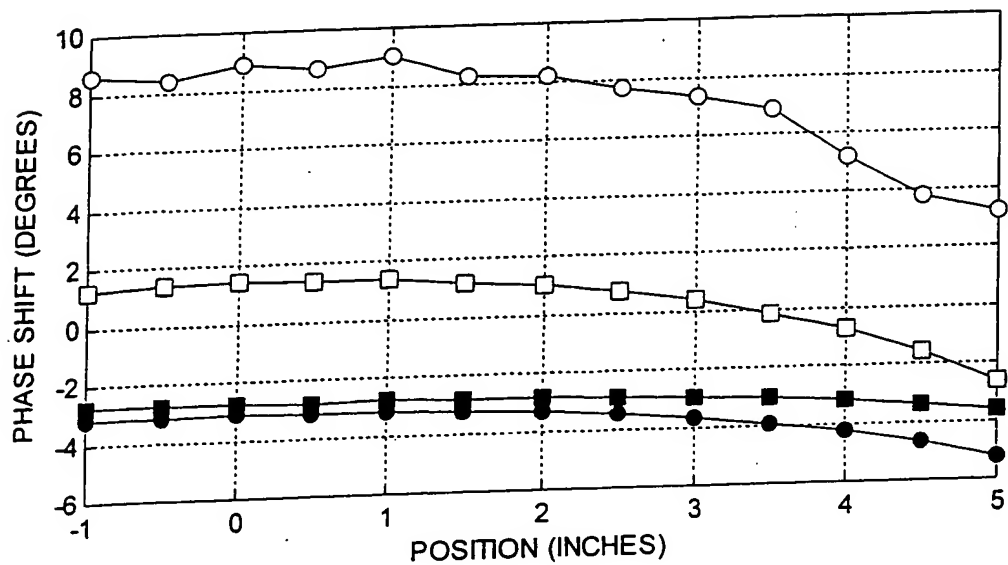
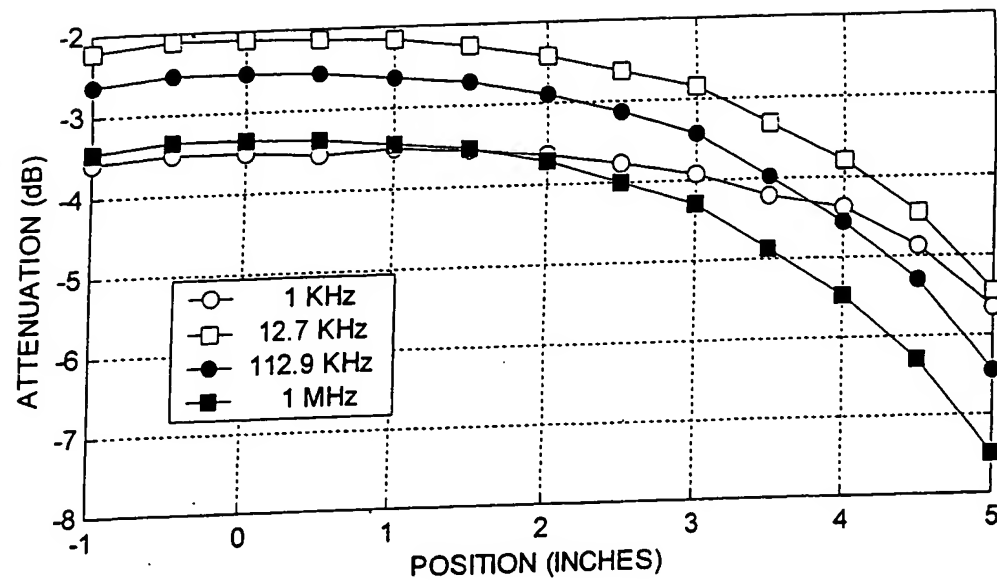


FIG. 24

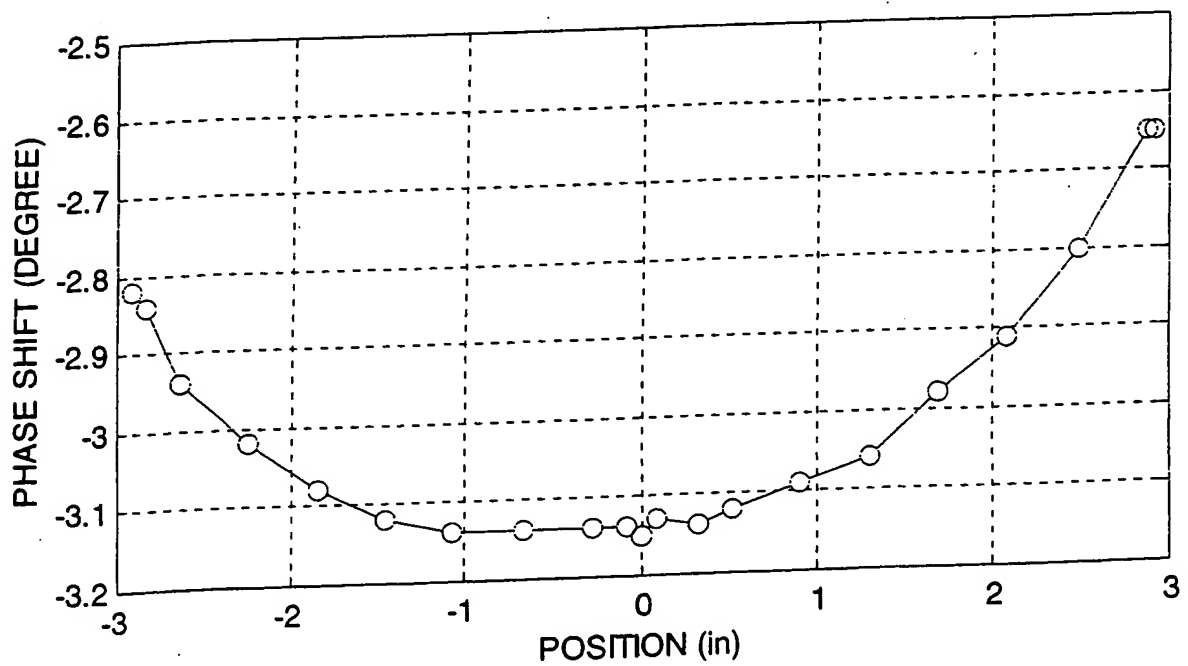
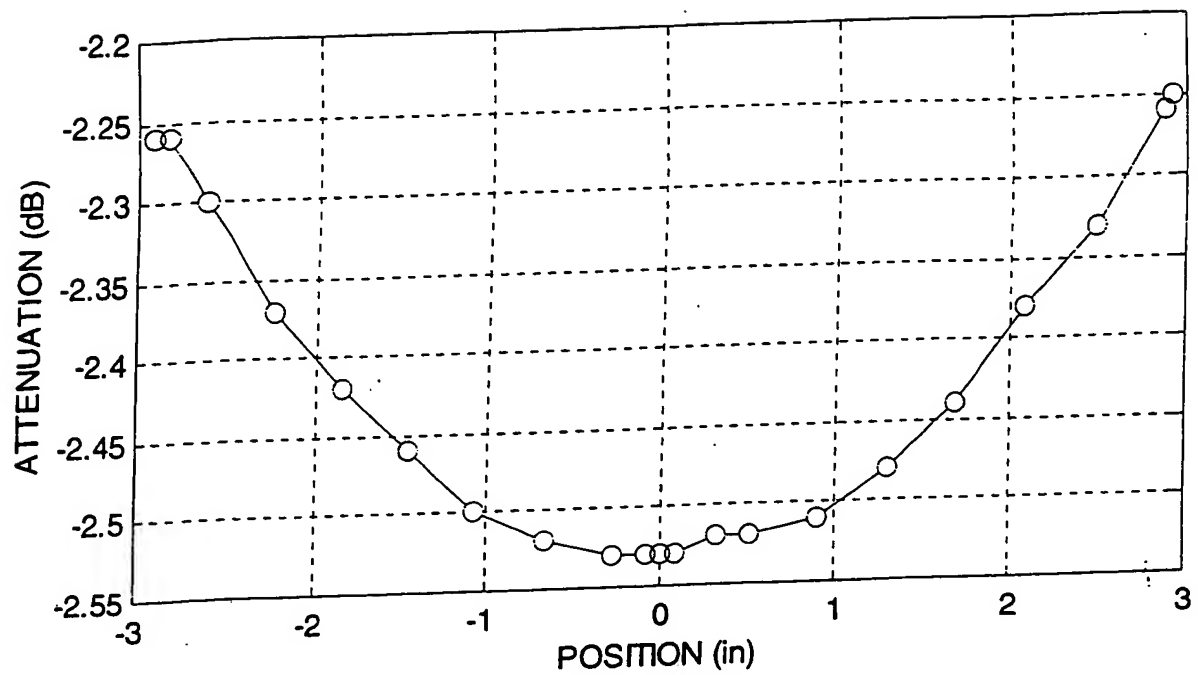


FIG. 25

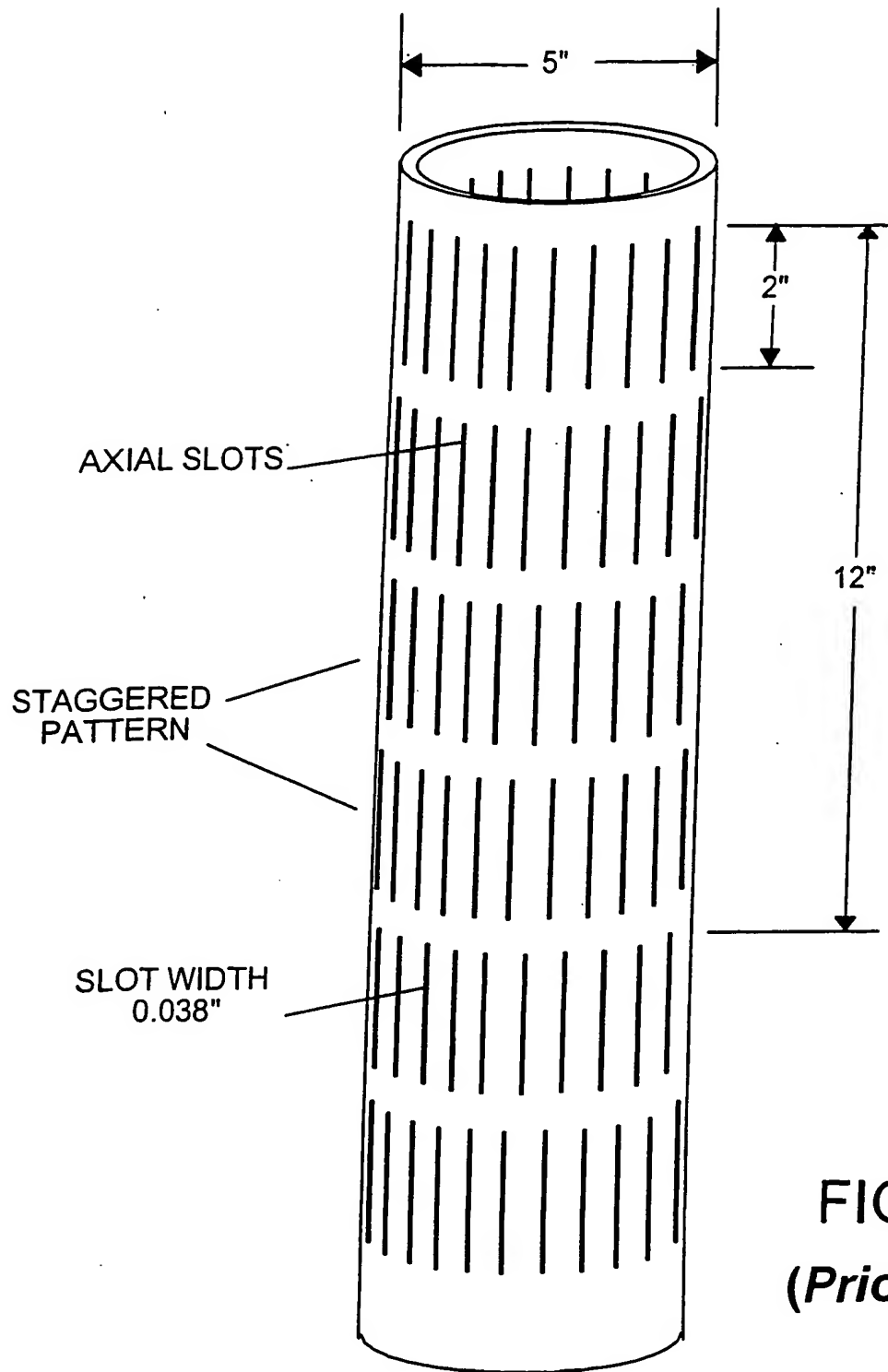


FIG. 26
(Prior Art)

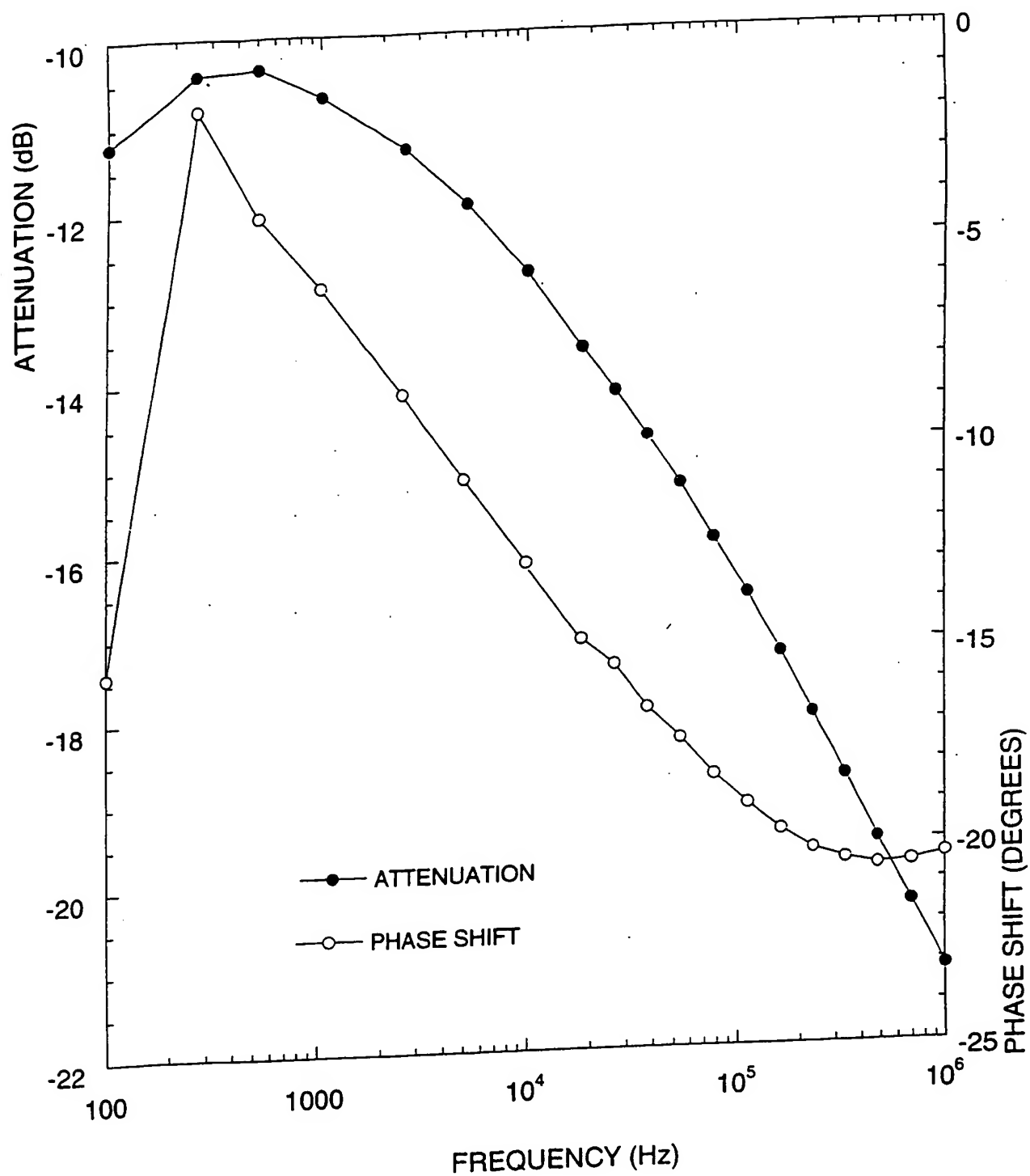


FIG. 27

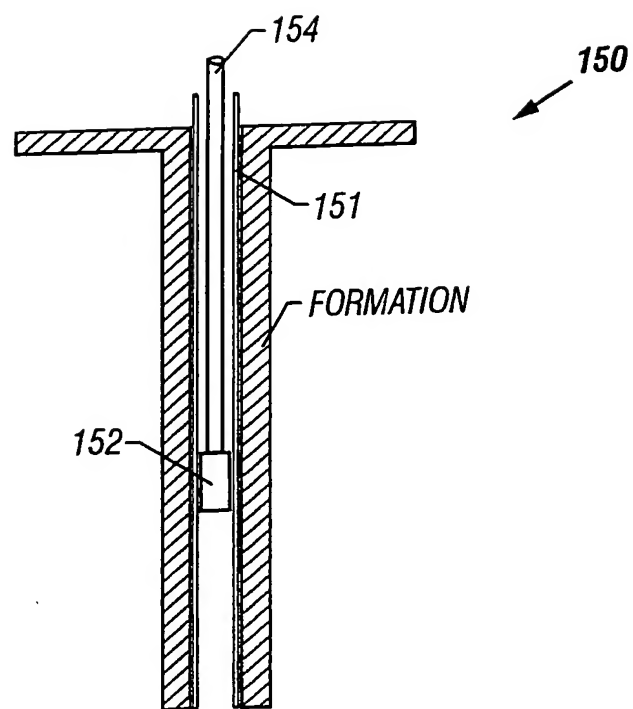


FIG. 28

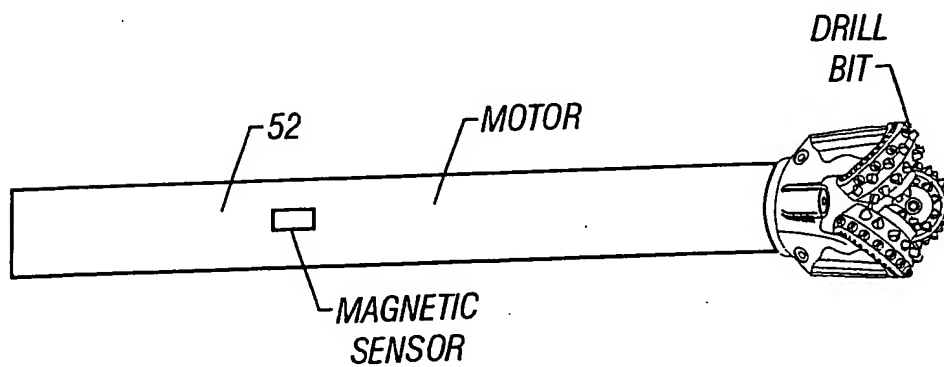
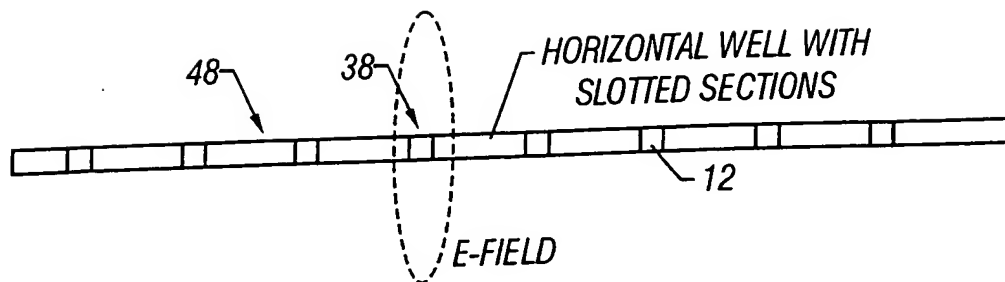


FIG. 29

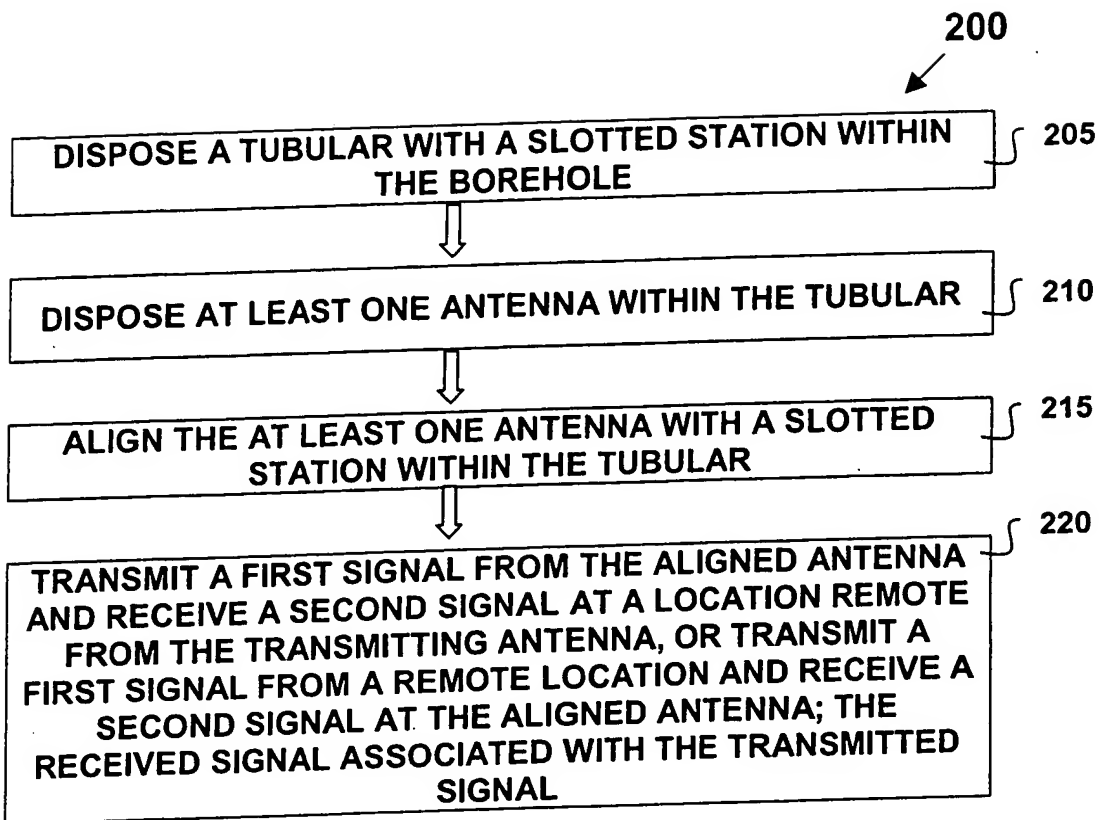


FIG. 30

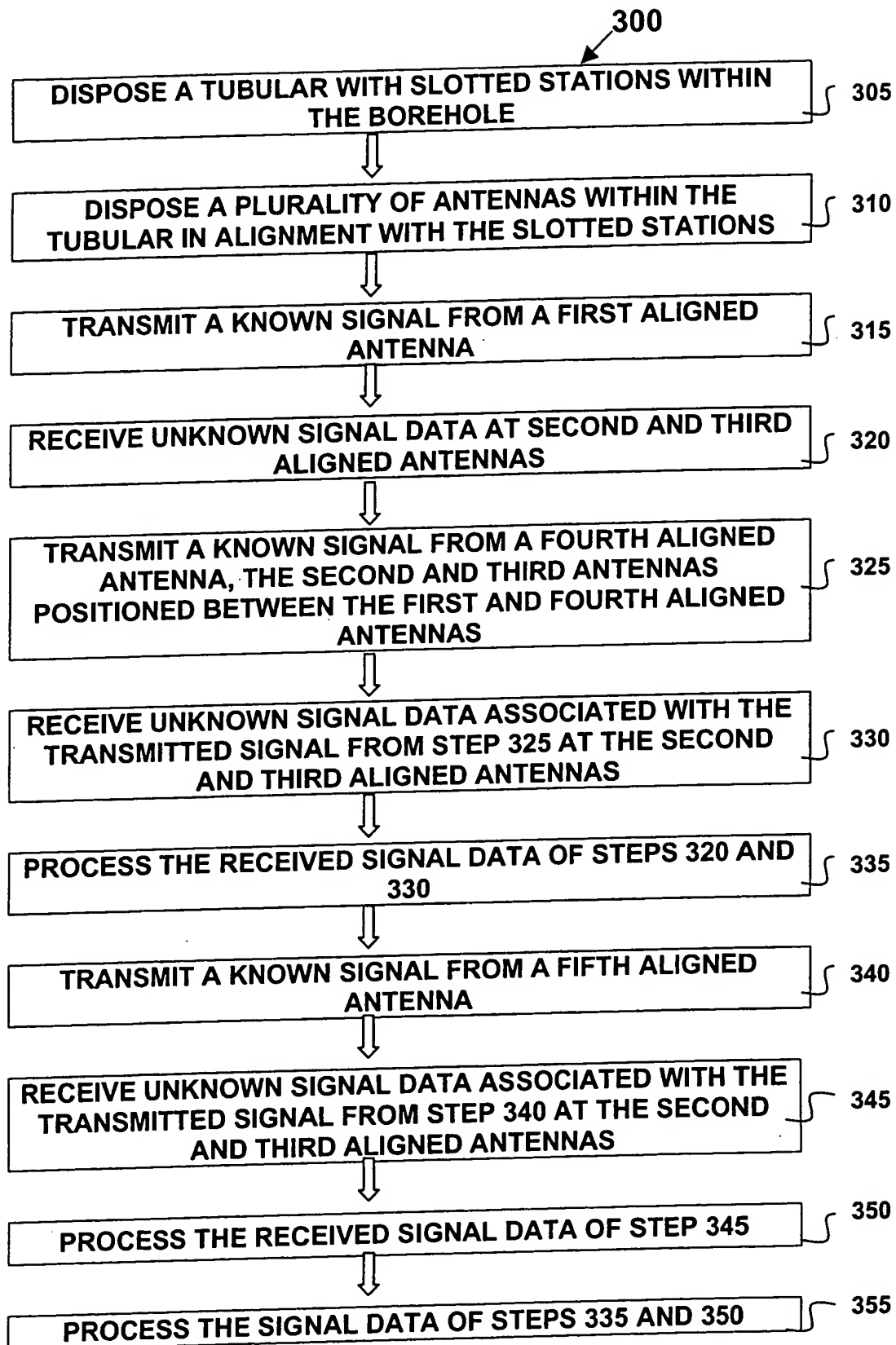


FIG. 31

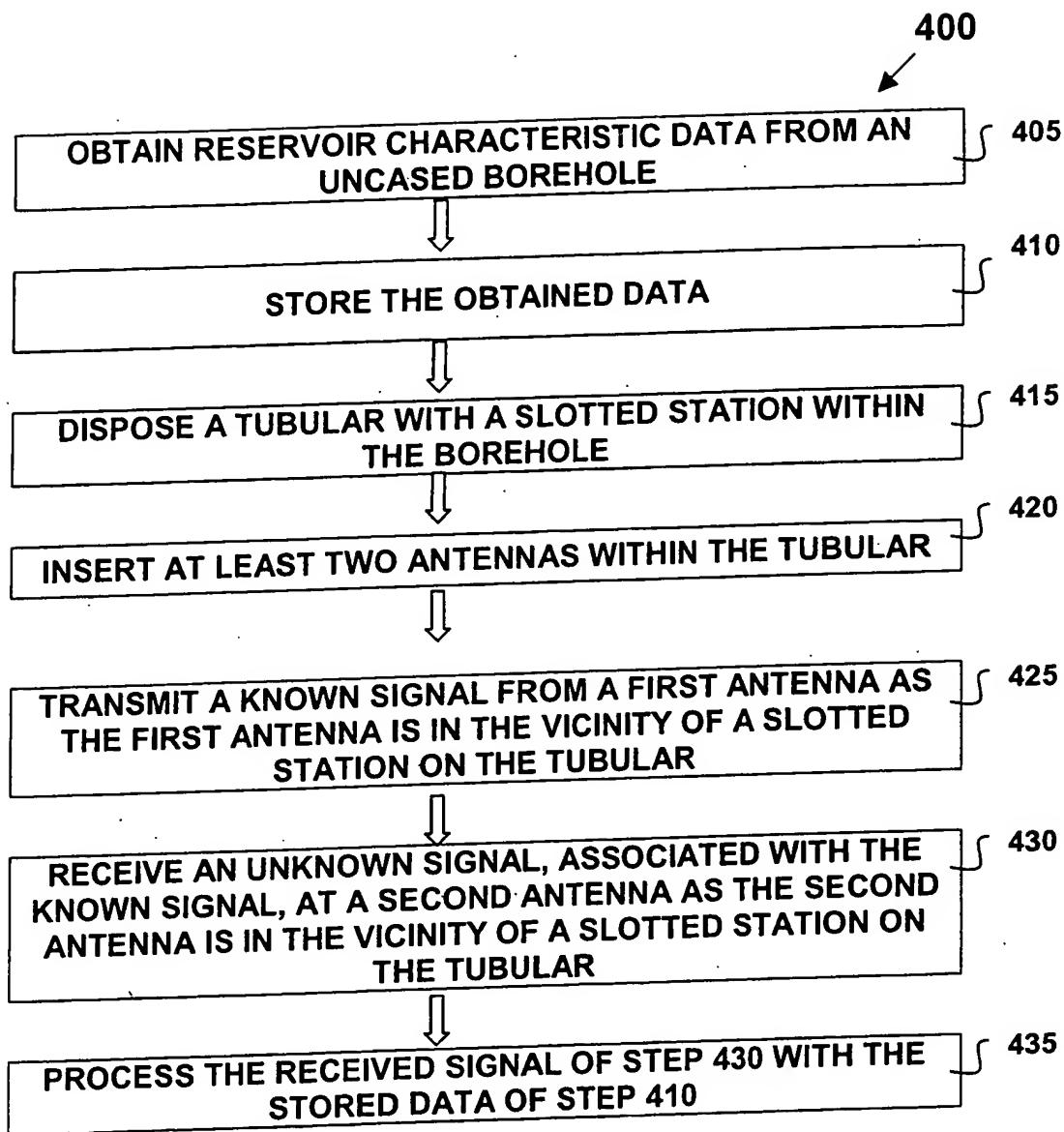


FIG. 32

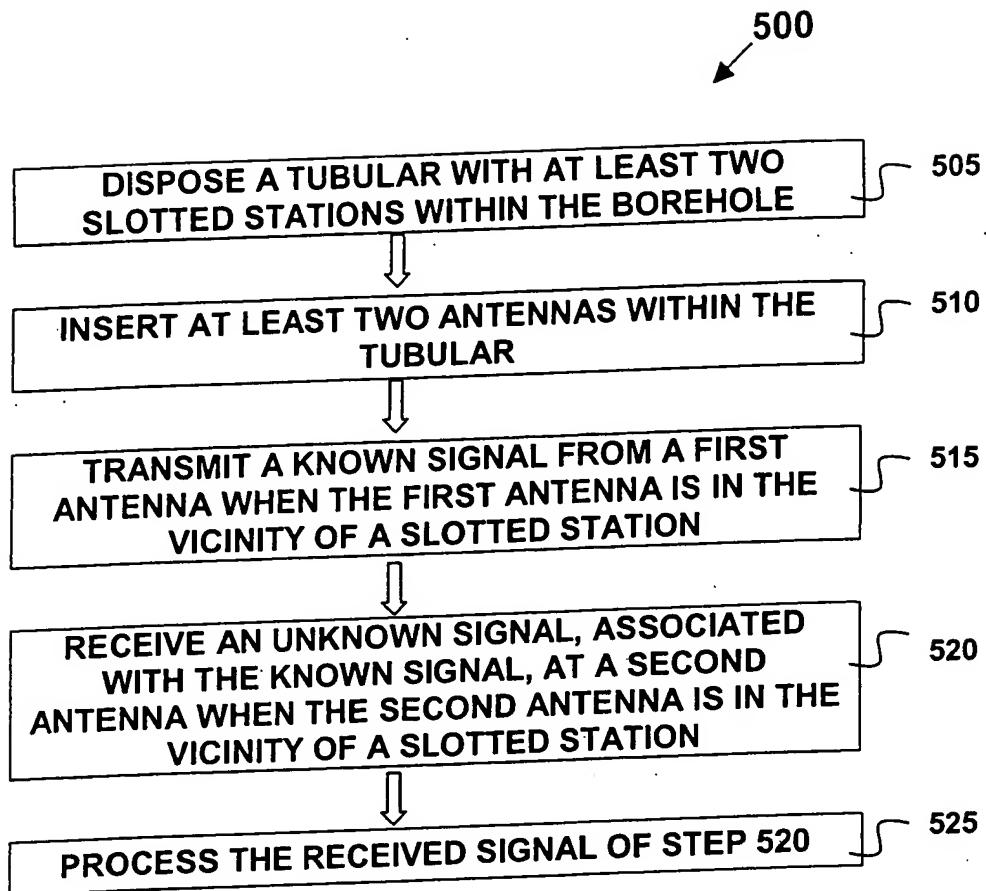


FIG. 33

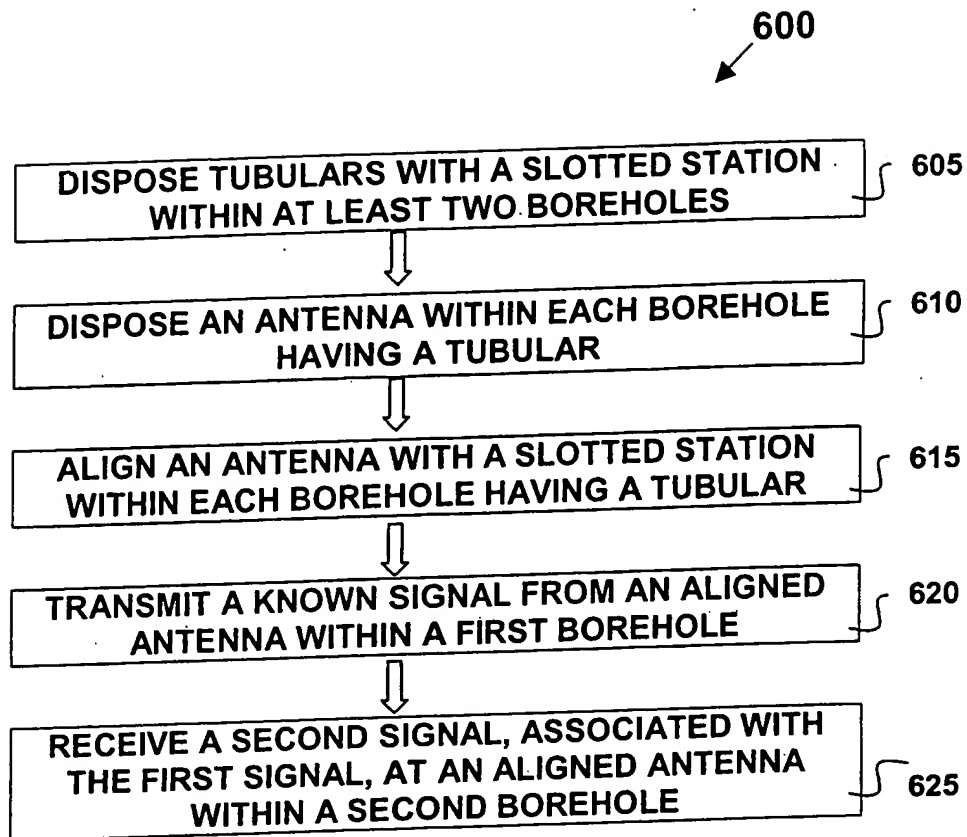


FIG. 34

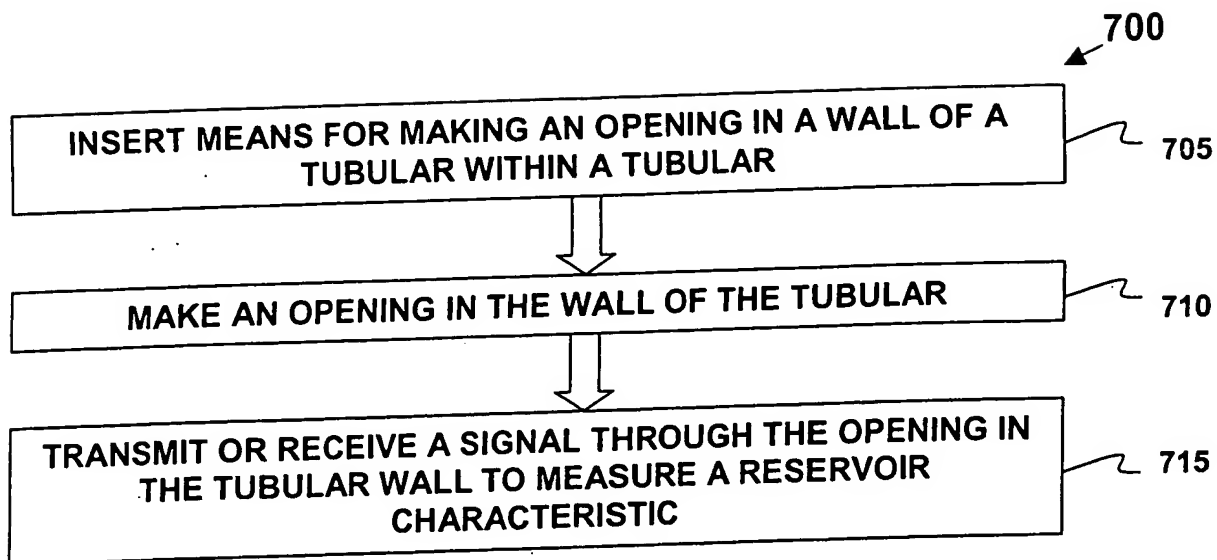


FIG. 35

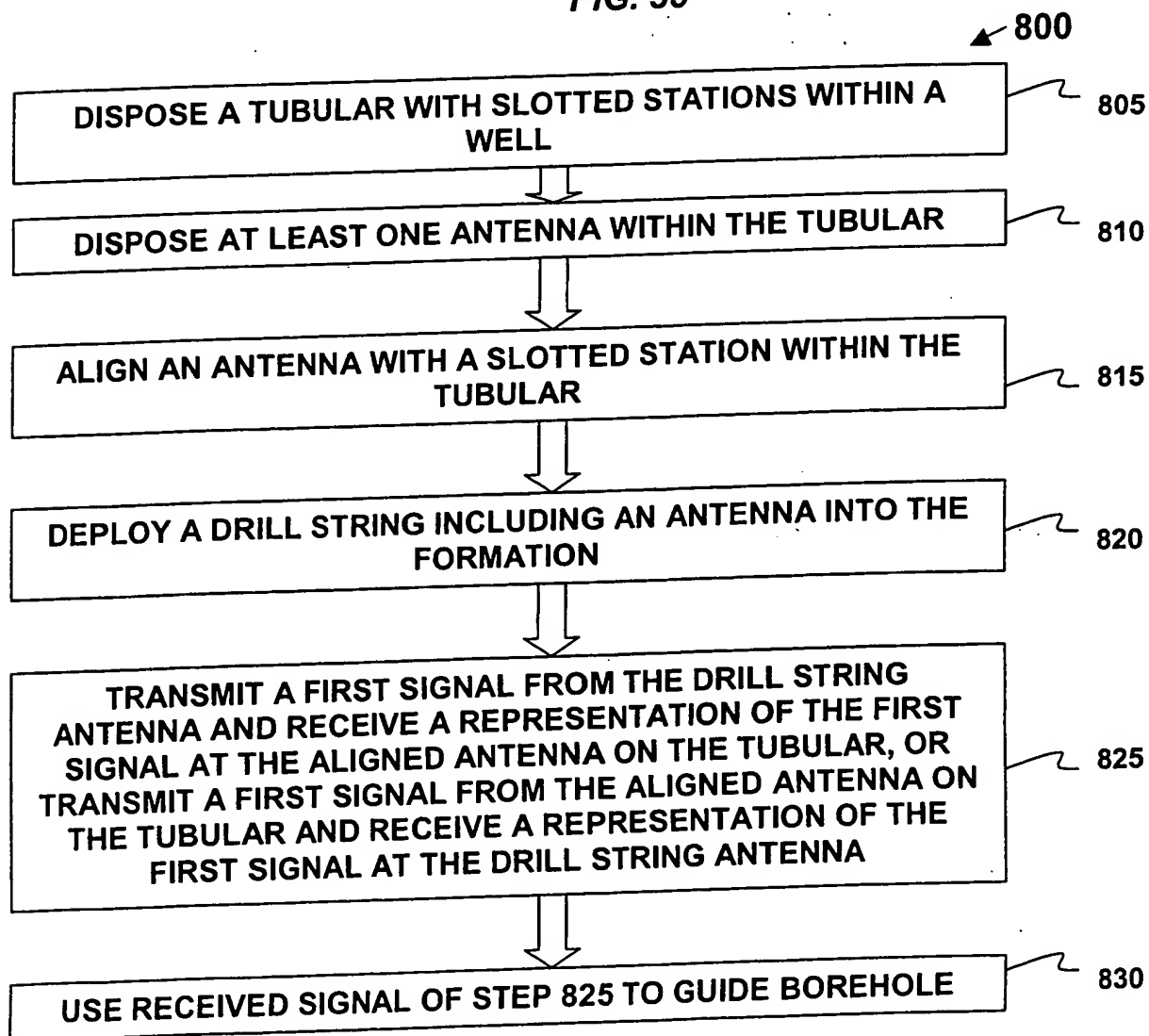


FIG. 36

900

DISPOSE A TUBULAR WITHIN THE BOREHOLE, THE
TUBULAR INCLUDING A SLOTTED STATION AND
MEANS TO HYDRAULICALLY ISOLATE THE
TUBULAR INTERIOR FROM A SURROUNDING
BOREHOLE AT THE SLOTTED STATION, THE
TUBULAR ADAPTED TO RECEIVE A SENSOR OR
ANTENNA FOR MONITORING A FORMATION
CHARACTERISTIC

FIG. 37

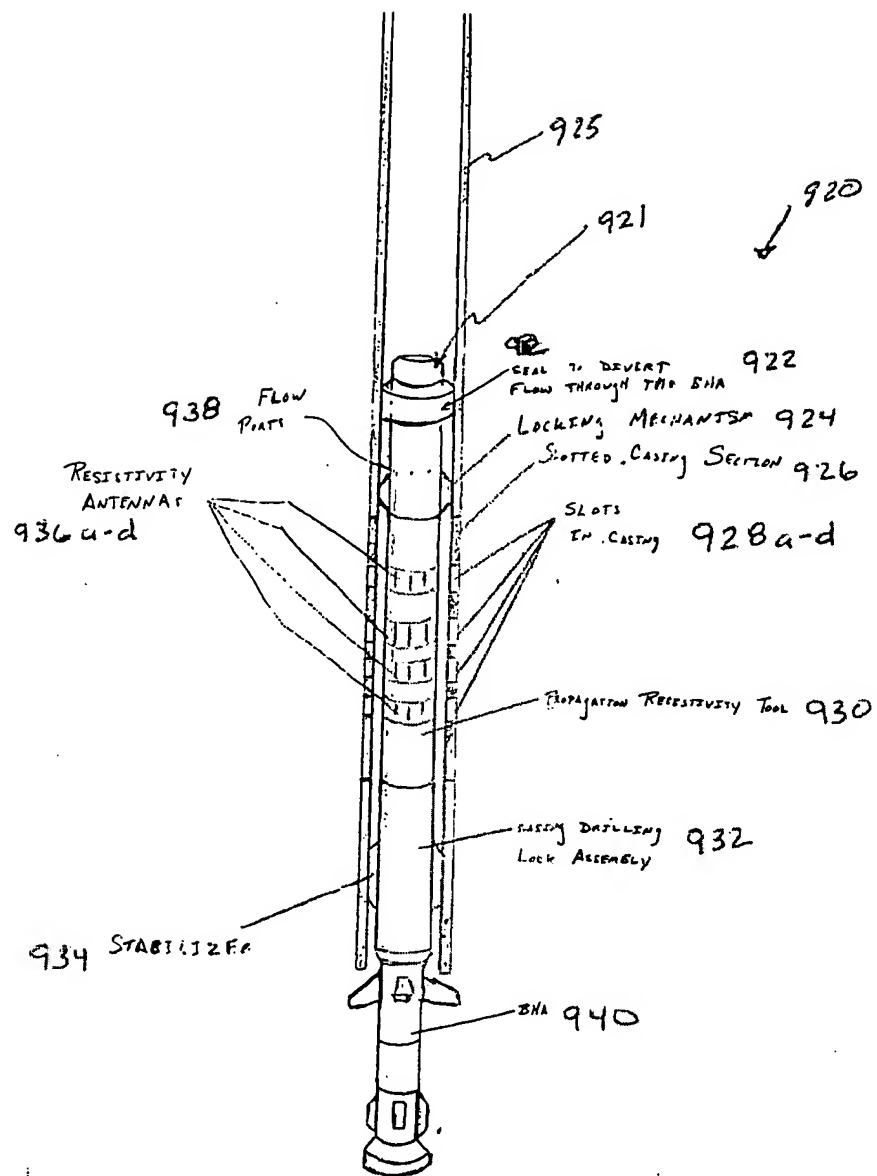


Figure 29a

950

DISPOSE A CASING TUBULAR HAVING A SLOTTED
STATION WITHIN THE BOREHOLE

952

ALIGN IN LOCKING FASHION AN ANTENNA
WITH THE SLOTTED STATION, THE ANTENNA
PART OF A CASING DRILLING APPARATUS

954

COMMENCE A DRILLING OPERATION

955

TRANSMIT INTO THE FORMATION THROUGH ONE OF THE
SLOTS A KNOWN SIGNAL FROM A FIRST ANTENNA

956

RECEIVE A SIGNAL, ASSOCIATED WITH THE KNOWN SIGNAL,
AT A SECOND ANTENNA VIA ONE OF THE OTHER SLOTS

958

PROCESS THE RECEIVED SIGNAL OF STEP 950

960